AMENDMENTS TO THE SPECIFICATION

Please add the following paragraph before page 1, line 1, of the specification:

This is a continuation of co-pending U.S. application Serial No. 09/939,858, filed August 27, 2001, which is a continuation of U.S. application Serial No. 08/922,068, filed September 2, 1997, now U.S. Patent No. 6,309,659.

Please amend the paragraph beginning at page 1, line 16, of the specification:

The carrier of the bone material in the art is a liquid, having a viscosity generally somewhere between runny and paste-like. "Runny" bone repair compositions have the advantage of being relatively easy to apply to and fill a bone defect, however they are disadvantageous in that the material also tends to readily flow from the defect site. Conversely, bone repair compositions with a "paste-like" consistency are harder to apply to a defect, yet tend to remain positioned at the defect once applied. Additionally, when any of the bone repair compositions in the art are placed in vivo and become warmed, they become even less viscous; the ~~decease~~ decrease in viscosity is due to the addition of thermal energy to the composition.

Please amend the paragraph beginning at page 2, line 24, of the specification:

The means for achieving reverse phase characteristics comprises a poloxamer, such as poloxamer 407. The block copolymer can be a solid ~~dissolved~~ dispersed in a biocompatible solvent such as sterile water.

Please amend the paragraph beginning at page 3, line 1, of the specification:

Preferably, the carrier comprises a carrier of 25 weight percent of a block copolymer ~~dissolved~~ dispersed in 75 weight percent of a biocompatible solvent. To vary the consistency of the composition, the weight percentage of demineralized bone powder or other solid can be varied relative to the weight percentage of the carrier in the composition. For example, a paste-like form of the composition comprises 50 weight percent of bone powder and 50 weight percent of a carrier ~~solution~~. A gel-like embodiment of the composition comprises ~~70~~ 30 weight percent of bone powder and ~~30~~ 70 weight percent of a carrier ~~solution~~.

Please amend the paragraph beginning at page 7, line 18, of the specification:

In preferred embodiments of a composition of the present invention, the carrier is a liquid diluted in a solvent or is a solid ~~dissolved~~ dispersed in a solvent. In one embodiment, PLURONIC® F127 is ~~dissolved~~ dispersed in a solvent such as sterile water. The PLURONIC® F127 carrier is vastly different in size, molecular weight, and chemical structure than carriers in the art. The carrier is also substantially different in terms of its functional properties than any carrier of a bone repair material in the art.

Please amend the paragraph beginning at page 7, line 27, of the specification:

The proposed composition has a unique physical property, being flowable at refrigerated temperatures and increasingly solidified at elevated temperatures, such as ambient and body temperatures. This property is referred to in the art as "reverse phase" or "reverse thermal behavior". Due to the reverse phase property of the proposed

composition, the composition is generally manufactured at refrigerated temperatures, such as 5 °C. Manufacturing is done at refrigerated temperatures to enhance mixing of the components of the composition, since the proposed composition comprising an aqueous ~~solution~~ suspension of PLURONIC® F127 begins to become more viscous at ambient temperature, and is increasingly viscous and solidified at body temperature. Generally, a composition of the invention will be twice as viscous at 35 °C as it is at 0 °C.

Please amend the paragraph beginning at page 8, line 13, of the specification:

For example, the preferred PLURONIC® F127 carrier in the composition of the present invention (when ~~dissolved~~ dispersed in an appropriate amount of sterile water), has the unique property of being a liquid at ~~ambient~~ refrigerated temperature and increasingly solidified, then solid at elevated temperature, absent the effects of evaporation and concomitant loss of water. This property is called "reverse phase" or "reverse thermal behavior" because it is the exact opposite of the thermodynamic properties exhibited by standard carriers.

Please amend the paragraph beginning at page 9, line 8, of the specification:

The unique reverse phase thermodynamic properties of the composition of the present invention allow the product to function in a substantially different, and preferred manner relative to other flowable bone repair products. When applied to a bone defect site, the reverse phase property of the preferred carrier provides support characteristics for the composition which are substantially different than the characteristics of standard

carriers. Enhanced support is provided by the composition of the invention. The preferred PLURONIC® F127 carrier of the composition of the present invention helps to provide support characteristics which are unlike those of any standard carrier. This is because the composition is flowable at ~~ambient~~ refrigerated temperature and can thus readily be applied to a bony defect site, but it becomes increasingly viscous and solidified once it is warmed at the site. The solidification of the composition of the present invention achieves ~~several;~~ several beneficial effects. When solidified, the composition does not flow away from the defect site, and the solidified product immediately augments and facilitates structural support at the defect. Also, since the osteogenic composition of the invention is initially liquid, it readily fills a defect, then becomes solidified and achieves enhanced osteogenesis. Moreover, with preferred compositions of the invention, comprising a sterile aqueous ~~solution~~ colloidal suspension of PLURONIC® F127 as a carrier and demineralized bone powder, the carrier will resorb or dissolve after about three days, leaving the osteogenic bone powder at the bone defect site. It is believed to be advantageous that the carrier ~~dissolves~~ disperses as this then allows enhanced ingrowth of connective or vascular tissues.

Please amend the paragraph beginning at page 10, line 23, of the specification:

To obtain a composition having a gel-like consistency, the composition comprised 70 weight percent of a ~~solution~~ colloidal suspension of PLURONIC® F127 and 30 weight percent of bone powder. In this example, the carrier comprised 25 weight percent of PLURONIC® F127 powder ~~dissolved~~ dispersed in 75 weight percent sterile water.

Please amend the paragraph beginning at page 13, line 17, of the specification:

To obtain a composition having a paste-like consistency, the composition comprised 50 weight percent of a ~~solution~~ colloidal suspension of PLURONIC® F127 and 50 weight percent of bone powder. In this example, the carrier comprised 25 weight percent of PLURONIC® F127 powder ~~dissolved~~ dispersed in 75 weight percent sterile water.